[4910-13-P]

### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2021-0829; Project Identifier MCAI-2021-00189-R]

**RIN 2120-AA64** 

Airworthiness Directives; Airbus Helicopters

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive

(AD) 2021-04-21, which applies to certain Airbus Helicopters Model EC120B helicopters. AD 2021-04-21 requires an inspection of the attachment bolts of the main rotor (MR) hub scissors assembly for discrepancies and repair if necessary; part marking of the attachment bolts of the MR hub scissors assembly; and repetitive inspections of the part marking of the attachment bolts, and repair if necessary. Since the FAA issued AD 2021-04-21, the FAA has determined that additional part marking of the washer, scissor branch, and mast ring of the corresponding nut side, and repetitive inspections of the additional part markings are necessary. This proposed AD would continue to require the actions in AD 2021-04-21; and also would require part marking of the washer, scissor branch, and mast ring of the corresponding nut side, and repetitive inspections of the additional part markings and repair if necessary; as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference (IBR). The FAA is proposing this AD to address the unsafe condition on these products. **DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45] DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
   Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC
   20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For material that is proposed for IBR in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; Internet: www.easa.europa.eu. You may find this IBR material on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. It is also available in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0829.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0829; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; phone: (202) 267-9167; email: hal.jensen@faa.gov.

#### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2021-0829; Project Identifier MCAI-2021-00189-R" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposal.

#### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked

submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; phone: (202) 267-9167; email: hal.jensen@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

# Background

The FAA issued AD 2021-04-21, Amendment 39-21443 (86 FR 17278, April 2, 2021) (AD 2021-04-21), which applies to certain Airbus Helicopters Model EC120B helicopters. AD 2021-04-21 requires an inspection of the attachment bolts of the MR hub scissors assembly for discrepancies and repair if necessary; part marking of the attachment bolts of the MR hub scissors assembly; and repetitive inspections of the part marking of the attachment bolts, and repair if necessary. The FAA issued AD 2021-04-21 to address broken and bent attachment bolts of the MR hub scissors assembly, which could lead to detachment of a MR hub scissors attachment bolt, possibly resulting in complete loss of control of the helicopter.

#### Actions Since AD 2021-04-21 Was Issued

Since the FAA issued AD 2021-04-21, the FAA has determined that additional part marking of the washer, scissor branch, and mast ring of the corresponding nut side, and repetitive inspections of the additional part markings are necessary to detect rotation of the attachment bolts of the MR hub scissors assembly.

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0046, dated February 12, 2021 (EASA AD 2021-0046) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all Airbus Helicopters Model EC120B helicopters. Although EASA AD 2021-0046 applies to all Model

EC120B helicopters, this proposed AD would apply to helicopters with an affected part installed instead.

This proposed AD was prompted by a report of broken and bent attachment bolts of the MR hub scissors assembly and a determination that additional part markings of the washer, scissor branch, and mast ring of the corresponding nut side, and repetitive inspections of the additional part markings are necessary. The FAA is proposing this AD to address broken and bent attachment bolts of the MR hub scissors assembly, which could lead to detachment of a MR hub scissors attachment bolt, possibly resulting in complete loss of control of the helicopter. See the MCAI for additional background information.

#### **Related Service Information Under 1 CFR Part 51**

EASA AD 2021-0046 specifies procedures for an inspection of the attachment bolts of the MR hub scissors assembly for discrepancies (discrepancies include corrosion, fretting, wear, cracking, bolt play, and bolt tightening torque) and repair if necessary; part marking of the washer, scissor branch, and mast ring of the attachment bolts and corresponding nut side of the MR hub scissors assembly; and repetitive inspections, after part marking, for discrepancies, and repair if necessary. The inspections of the attachment bolts of the MR hub assembly include checking the play and torque of the scissors attachment bolts and making sure that there are no hard spots in the scissors link hinge.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition

described in the MCAI referenced above. The FAA is proposing this AD after evaluating all the relevant information and determining the unsafe condition described previously is likely to exist or develop in other products of the same type design.

# **Explanation of Retained Requirements**

Although this proposed AD does not explicitly restate the requirements of AD 2021-04-21, this proposed AD would retain all of the requirements of AD 2021-04-21. Those requirements are referenced in EASA AD 2021-0046, which, in turn, is referenced in paragraph (g) of this proposed AD.

# **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in EASA AD 2021-0046 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD.

# **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities to use this process. As a result, EASA AD 2021-0046 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2021-0046 in its entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in the EASA AD does not mean that operators need comply only with that section. For example, where the AD requirement refers to "all required actions and compliance times," compliance with this AD requirement is not limited to the section titled "Required Action(s) and Compliance Time(s)" in the EASA AD. Service information specified in

EASA AD 2021-0046 that is required for compliance with EASA AD 2021-0046 will be available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0829 after the FAA final rule is published.

# **Costs of Compliance**

The FAA estimates that this proposed AD affects 89 helicopters of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

# **Estimated costs for required actions**

| Action   | Labor cost  | Parts cost | Cost per<br>product       | Cost on U.S. operators       |
|--|---|------------|---------------------------|------------------------------|
| Inspection for discrepancies (retained actions from AD 2021-04-21)                     | 4 work-hours X<br>\$85 per hour =<br>\$340                        | \$0        | \$340                     | \$30,260                     |
| Part Marking<br>(retained actions<br>from<br>AD 2021-04-21)                            | 1 work-hour X<br>\$85 per hour =<br>\$85                          | \$0        | \$85                      | \$7,565                      |
| Repetitive<br>Inspection of<br>Markings<br>(retained actions<br>from<br>AD 2021-04-21) | 1 work-hour X<br>\$85 per hour =<br>\$85 per<br>inspection cycle  | \$0        | \$85 per inspection cycle | \$7,565 per inspection cycle |
| Additional Part<br>Marking (new<br>proposed action)                                    | 1 work-hour X<br>\$85 per hour =<br>\$85                          | \$0        | \$85                      | \$7,565                      |
| Repetitive<br>Inspection (new<br>proposed action)                                      | 1 work-hours X<br>\$85 per hour =<br>\$85 per<br>inspection cycle | \$0        | \$85 per inspection cycle | \$7,565 per inspection cycle |

The FAA estimates that it would take about 1 hour per product to comply with the proposed reporting requirement in this proposed AD. The average labor rate is \$85 per hour. Based on these figures, the FAA estimates the cost of reporting on U.S. operators to be \$7,565, or \$85 per product.

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of helicopters that might need these on-condition actions:

### **On-condition costs**

| Action                         | Labor cost                                 | Parts cost | Cost per product |
|--------------------------------|--|------------|------------------|
| Repair of the attachment bolts | 4 work-hours X<br>\$85 per hour =<br>\$340 | \$40       | \$380            |

### **Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this proposed AD is 2120-0056. The paperwork cost associated with this proposed AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this proposed AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Pkwy., Fort Worth, TX 76177-1524.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

# **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### § 39.13 [Amended]

- 2. The FAA amends § 39.13 by:
- a. Removing Airworthiness Directive (AD) 2021-04-21, Amendment 39-21443 (86 FR 17278, April 2, 2021); and
  - b. Adding the following new AD:

**Airbus Helicopters:** Docket No. FAA-2021-0829; Project Identifier MCAI-2021-00189-R.

### (a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

This AD replaces AD 2021-04-21, Amendment 39-21443 (86 FR 17278, April 2, 2021) (AD 2021-04-21).

#### (c) Applicability

This AD applies to Airbus Helicopters Model EC120B helicopters, certificated in any category, having an affected part as defined in European Union Aviation Safety Agency (EASA) AD 2021-0046, dated February 12, 2021 (EASA AD 2021-0046).

### (d) Subject

Joint Aircraft System Component (JASC) Code 6200, Main Rotor System.

## (e) Unsafe Condition

This AD was prompted by a report of broken and bent attachment bolts of the main rotor (MR) hub scissors assembly and a determination that additional part markings of the washer, scissor branch, and mast ring of the corresponding nut side, and repetitive inspections of those part markings, are necessary to detect any rotation. The FAA is is issuing this AD to address broken and bent attachment bolts of the MR hub scissors

assembly, which could lead to detachment of a MR hub scissors attachment bolt, possibly resulting in complete loss of control of the helicopter.

### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

### (g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2021-0046.

# (h) Exceptions to EASA AD 2021-0046

- (1) Where EASA AD 2021-0046 refers to its effective date, this AD requires using the effective date of this AD.
- (2) Where EASA AD 2021-0046 refers to September 05, 2018 (the effective date of EASA AD 2018-0186), this AD requires using May 7, 2021 (the effective date of AD 2021-04-21).
- (3) This AD does not mandate compliance with the "Remarks" section of EASA AD 2021-0046.
- (4) Where the service information referenced in EASA AD 2021-0046 specifies to discard certain parts, this AD requires removing those parts from service.
- (5) Where EASA AD 2021-0046 refers to flight hours (FH), this AD requires using hours time-in-service.
- (6) Paragraphs (3) and (4) of EASA AD 2021-0046 refer to "discrepancies." For this AD, discrepancies include corrosion, fretting, wear, cracking, bolt play, twist, shearing, rupture, and bolt tightening torque.
- (7) Where EASA AD 2021-0046 specifies to contact the manufacturer for repair instructions, this AD requires the repair to be done in accordance with a method approved by the Manager, General Aviation and Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopter's EASA Design Organization Approval

- (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.
- (8) Paragraph (5) of EASA AD 2021-0046 specifies to report inspection results to Airbus Helicopters within a certain compliance time. For this AD, report inspection results at the applicable time specified in paragraph (h)(8)(i) or (ii) of this AD.
- (i) If the inspection was done on or after May 7, 2021 (the effective date of AD 2021-04-21): Submit the report within 30 days after the inspection.
- (ii) If the inspection was done before May 7, 2021 (the effective date of AD 2021-04-21): Submit the report within 30 days after May 7, 2021.

# (i) Special Flight Permit

Special flight permits, as described in 14 CFR 21.197 and 21.199, are not allowed.

# (j) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

### (k) Related Information

(1) For EASA AD 2021-0046, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu;

Internet: www.easa.europa.eu. You may find this EASA AD on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0829.

(2) For more information about this AD, contact Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; phone: (202) 267-9167; email: hal.jensen@faa.gov.

Issued on September 16, 2021.

Lance T. Gant, Director, Compliance & Airworthiness Division, Aircraft Certification Service.

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